





PROJECT DESCRIPTION

The Joint Rapid Airfield Construction (JRAC) 2007 Demonstration Project involves the design and construction of a C-130 and C-17 capable Assault Landing Zone (ALZ) at Bradshaw Field Training Area (BFTA) in Northern Territory, Australia. The purpose of this project is to: (1) demonstrate the technologies developed under the JRAC program and (2) provide BFTA with a facility to accommodate C-17 and C-130 aircraft operations in order to improve the training effectiveness of the range.

The project will be designed in accordance with the criteria prescribed in ETL 04-07 and ETL 97-9 to meet the requirements of C-17 and C-130 aircraft. The airfield will be constructed using the equipment, tools, techniques, and methods developed under the JRAC program. The airfield will be 4100 ft (1250 m) in length, have a minimum maximum on ground (MOG) 1 apron, and will have a semi-prepared surface consisting of aggregate material obtained from local borrow sites. Bradshaw ALZ will be structurally designed to accommodate 500 passes of a C-17 aircraft and will be designed in a manner to maximize the durability of the airfield, minimize the maintenance requirements, and allow for future improvements or upgrades (e.g. sealing of the surface). The airfield will be constructed using military construction equipment from the Australian military and US military in a manner consistent with how this type of construction would be accomplished in a contingency environment.

Bradshaw Field Training Area (BFTA) is located near Timber Creek within the Victoria River Region of the Northern Territory, approximately 600km by road southwest of Darwin. Situated at the southwestern extremity of the Top End (Figure 1), the region is subject to the summer monsoon or wet season from October to April, the dry season from May to September and periods of transition in between.



Figure 1. Location of Bradshaw Field Training Area



Figure 2. Location of Proposed Airfield

BFTA is a pastoral lease of some 8,700 km2 and is bounded to the north by the Fitzmaurice River and Wombungi Station, to the west by the Joseph Bonaparte Gulf, to the south by the Victoria River and to the east by Coolibah and Innesvale Stations (Figure 2). The property is approximately 150 km east to west and 70 km north to south. It consists of six major physiographic regions: hills and plain to the east (Eastern Hills), a large open plain (Angalarri Plain), a central plateau (Yambarran Plateau), a narrow valley (Koolendong Valley), dissected hills to the west (Western Hills), and a littoral zone which borders the ocean.

TRAINING AREA USE

The Australian Department of Defence has purchased the pastoral lease for Bradshaw Station and is in the process of developing the property into a field training facility which will permit it to exercise armored, artillery, engineer, infantry and aviation elements in a range of combat activities including reconnaissance, maneuver and field live firing from sub-unit to formation level, joint exercises with other Australian forces, combined exercises with foreign forces and delivery of aerial ordnance in support of ground exercises.

The Australian Department of Defence aims to develop the necessary infrastructure and environmental management procedures to ensure the long-term sustainable use of Bradshaw Station as a field training area while also affording ongoing protection to environmentally sensitive areas.

The majority of training would be undertaken in the dry season and would range from simple reconnaissance to formation level training. This could include the use of a range of vehicles such

as tanks, light armored vehicles, armored personnel carriers, artillery, heavy trucks and 4WDs and a range of weapons such as small arms, grenades, howitzers, mortars, 66mm light armored weapons, 84mm medium armored weapons, 105 mm main armament, machine guns, 25mm cannon and aircraft mounted high explosive warhead weapons.

PROPOSED INFRASTRUCTURE

A number of construction activities have been proposed for BFTA to support the training operations. A number of these projects are already complete or currently under construction. A list of the proposed activities for the training area includes:

- All weather access to the property via a bridge over the Victoria River.
- An internal road network comprising some 300 km of unsealed primary and secondary roads.
- o A Training Force Maintenance Area (TFMA) comprising storage hardstands and austere working accommodation (workshops and hardstands).
- A Range Control Facility including a communications room, offices, briefing room, accommodation and support facilities.
- Two 500 person Scale A Camps which include austere accommodation, mess and ablution facilities. One camp would be constructed as part of the TFMA and the other on the Yambarran Plateau.
- Two airstrips 1550 m long and 24 m wide with adjoining parking areas 300 m by 250 m.
 One airstrip would be located adjacent to the TFMA and the other strip would be located adjacent to the camp on the Yambarran Plateau.
- A "landing craft hard" to allow medium and heavy landing craft access to BFTA. The landing craft hard comprises a concrete landing point leading to a concrete loading and off-loading point and would be constructed on the banks of the Victoria or Angalarri Rivers.
- Engineering Services including a vehicle wash down facility at the TFMA, sanitation and effluent disposal, electrical power, drainage and water supply.
- Caretaker facilities comprising a standard 3-4 bedroom house plus office, storage and maintenance facilities. One residence is initially planned with a further two under consideration.
- A petrol, oil and lubricant (POL) facility for the storage and handling of diesel, petrol, kerosene, oils and lubricants.
- Explosive storage facilities for the short-term storage of ammunition.
- Boundary fencing and warning signs.